

REMARKS

Please reconsider this application in view of the following remarks. Applicant thanks the Examiner for carefully considering this application and for indicating that claims 3, 5, and 6 contain allowable subject matter.

Disposition of the Claims

Claims 1-7 are pending in this application. Claims 1-4 are independent. The other claims depend, directly or indirectly, from the independent claims.

Double Patenting

Claims 1-2 were provisionally rejected on the ground of non-statutory obviousness-type double patenting over U.S. Patent Application Serial No. 10/583,532. Applicant notes that this rejection is provisional and, accordingly, this rejection will be addressed in due course after at least one of the patent applications involved is issued as a patent. Applicant respectfully notes that a provisional obviousness-type double patenting rejection may not be the only pending rejection in a patent application.

Rejection(s) under 35 U.S.C. § 102

Claims 1 and 2 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent Application Publication No. 2002/0050969 ("Ohura"). For the following reasons, this rejection is respectfully traversed.

"A claim is anticipated only if *each and every element* as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987) (emphasis added). Further, "[t]he identical invention must be shown in as complete detail as is contained in the claim."

Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236 (Fed. Cir. 1989). Furthermore, *each limitation* of every claim must be given weight in determining patentability. See *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970) (“*All words* in a claim must be considered in judging the patentability of that claim against the prior art.” (emphasis added)); MPEP § 2106 (“USPTO personnel should begin claim analysis by identifying and evaluating *each* claim limitation.” (emphasis added)). Broad generalizations of the claim limitations are insufficient to support an anticipation or obviousness rejection. MPEP § 2141.02 (“Distilling an invention down to the ‘gist’ or ‘thrust’ of an invention disregards the requirement of analyzing the subject matter ‘as a whole.’”).

Referring to the specification for purposes of illustration only, one or more embodiments of the present invention relate to a signal generation device that generates an encoded transmission signal which is used for transmitting a video signal through radio communication. *The transmission signal contains information obtained by encoding a video signal in units of a video signal corresponding to a predetermined number of vertical periods* and a flag indicative of a header portion of the transmission signal is added to the header portion of the transmission signal. A radio video transmission device includes this signal generation device. See paragraph [0010] of the published specification.

In one or more embodiments, a video signal of the NTSC (interlace) method produces a video signal corresponding to two fields that forms one screen (one frame). A video signal which is encoded in units of a video signal corresponding to a predetermined number of vertical periods will be referred to as an encoded frame. The encoded video signal corresponding to four fields will be referred to as one encoded frame. See paragraph [0011] of the published specification. As shown in Figure 2 of the present specification, *the first encoded*

frame is composed of an encoded input video signal where F1, F2, F3, and F4 represent the four fields. The encoder circuit 14 encodes the input video signal (F1, F2, F3, and F4) to generate the first encoded frame and outputs the encoded frame at intervals of every other frame period to a transmission buffer 15. See Figure 2 and paragraph [0022] of the published specification. Encoding (compression) of the video signal is performed in units of a video signal corresponding to a predetermined number of vertical periods, i.e., the four fields noted above. While the amount of data generated by this encoding varies, the transmission intervals of data of the header of an encoded video signal corresponding to a predetermined number of vertical periods are always held in a unit of a predetermined number of vertical synchronization signals, i.e., the encoded frame start flag is transmitted at such intervals. As a consequence, on the reception side, decoding is performed on the basis of the encoded frame start flag which is received at fixed intervals, thereby achieving clock synchronization of a video signal reception. See paragraph [0032] of the published specification.

Accordingly, claim 1 requires, in part, “[a] radio video transmission device for encoding a video signal and radio-transmitting the encoded video signal, the radio video transmission device being configured such that encoding is performed in units of a video signal corresponding to a predetermined number of vertical periods, *intervals at which data of a header of the encoded video signal corresponding to the predetermined number of vertical periods is transmitted conform to the predetermined number of vertical periods*, and during transmission of the header data of the video signal corresponding to the predetermined number of vertical periods, information indicative of the header data is multiplexed and transmitted.”

Claim 2 requires “[a] signal generation device for generating an encoded transmission signal which is used for transmitting a video signal through radio communication, wherein a transmission signal including information obtained by *encoding a video signal in units of a video signal corresponding to a predetermined number of vertical periods is generated, and a flag indicative of a header portion of the transmission signal is added to the header portion of the transmission signal.*”

Ohura relates to signal processing for converting a YUV signal into an RGB signal for display on an LCD. Specifically, “[i]n a radio communication terminal for transmitting/receiving video data according to this embodiment, a video signal received from the MM processing unit 211 and a video signal from the camera 204 in FIG. 9 are sent to the LCD control unit 205 in the form of YUV video signal. The LCD control unit 205 converts these video signals to RGB signals for display on the LCD 206.” See paragraph [0048] of Ohura. As shown in Figure 4 of Ohura, “moving image YUV data is stored in a memory of the MM processing unit 401, and the LCD control unit 403 applies the MM processing unit 401 with the horizontal synchronization signal, vertical synchronization signal, and timing clock for retrieving the YUV data. In response the MM processing unit 401 enters one horizontal period of a moving image sequence for starting the delivery of YUV data of a moving image when a predetermined number of horizontal periods of the moving image sequence have passed, *i.e.*, when a vertical blank period has passed after it had received the vertical synchronization signal. See Figure 4 and paragraph [0052] of Ohura.

Ohura also discloses that, similar to the vertical period, horizontal moving YUV data is sent after the horizontal synchronization signal period and the horizontal blank period in one horizontal period of the moving image sequence in which the MM processing unit 401 sends

YUV data. In sequence, as a scan in the horizontal direction is completed for a vertical size of the moving image, a horizontal scanning period continues, in which no YUV data is sent, until entering the aforementioned horizontal period of the moving image sequence of the next frame, in which the MM processing unit 401 starts sending the YUV data. In the following, similar operations are repeated to send continuous moving image YUV data. See paragraph [0053] of Ohura. As such, Ohura merely discloses the use of synchronization signals to eliminate blanking periods as part of extracting an image and is not the same as encoding a digital signal as required by claims 1 and 2 of the present application.

In the present Office Action, the Examiner alleges that Ohura discloses all the limitations of claims 1 and 2 of the present application. The Applicant respectfully disagrees and asserts that the Examiner has mischaracterized Ohura and the claimed invention. The disclosed technique of Ohura is completely different from a technique of encoding and converting an analog signal into a digital signal required by the claimed invention. This is evidenced, in part, by the citation of paragraphs [0053] and [0053] of Ohura by the Examiner. As noted above, Ohura merely discloses a technique of using vertical and horizontal synchronization signals included in the YUV signal to eliminate portions such as vertical and horizontal blanking periods that do not relate to the actual display, to extract an image for displaying on an LCD. As such, the disclosure of Ohura is not the same as encoding a digital signal as required by claimed invention. While paragraph [0019] of Ohura discloses the use of a flag indicating a start of a frame when encoding in MPEG-4, the Examiner has wrongly equated the flag of Ohura to the flag of the claimed invention. While the words are the same, the flag of the claimed invention must be read in light of the specification. Applicant respectfully asserts that Ohura is completely silent with respect to *"intervals at which data of a header of the*

encoded video signal corresponding to the predetermined number of vertical periods is transmitted to conform to the predetermined number of vertical periods” as required by claim 1 and “encoding a video signal in units of a video signal corresponding to a predetermined number of vertical periods is generated, and a flag indicative of a header portion of the transmission signal is added to the header portion of the transmission signal” as required by claim 2.

In contrast to Ohura, claim 1 requires, in part, encoding in units of a video signal corresponding to a predetermined number of vertical periods (four fields), intervals at which data of a header of the encoded video signal corresponding to the predetermined number of vertical periods is transmitted conform to the predetermined number of vertical periods. During transmission of the header data of the video signal corresponding to the predetermined number of vertical periods, information indicative of the header data is multiplexed and transmitted. Also in contrast to Ohura, claim 2 requires, in part, a transmission signal including information obtained by encoding a video signal in units of a video signal corresponding to a predetermined number of vertical periods is generated, and a flag indicative of a header portion of the transmission signal is added to the header portion of the transmission signal. As such, Ohura fails to show or suggest, at least, the above-noted limitations of claims 1 and 2.

In view of the above, Ohura fails to show or suggest each and every limitation of the claimed invention. Thus, independent claims 1 and 2 are patentable over Ohura for at least the reasons set forth above. Accordingly, withdrawal of this rejection is respectfully requested.

Rejection(s) under 35 U.S.C. § 103

Claims 4 and 7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ohura. For the following reasons, this rejection is respectfully traversed.

MPEP § 2143 states that “[t]he key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR* noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit.” Further, when combining prior art elements, the Examiner “must articulate the following: (1) a finding that the prior art included each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference...” See MPEP § 2143(A).

Claim 4 requires, in part, “[a] signal decoding device for decoding a transmission signal received through radio communication, comprising” “a flag extraction section which extracts a flag indicative of a header portion of the transmission signal added to the header portion of the transmission signal which is radio-received,” “wherein an encoded video signal included in the transmission signal is decoded at timing in accordance with a reference signal output from the flag extraction section.”

In the present Office Action, the Examiner admits that Ohura is silent with respect to a flag extraction section in the decoding device to extract a flag indicative of a header portion used by the decoder. However, the Examiner alleges that, because Ohura discloses a flag indicative of a header portion, the receiver/decoder/demultiplexer would extract the flag from the encoded video signal and based on the information in the header data properly perform

the decoding process. *See* Office Action of July 22, 2010, at page 4. However, as noted above with respect to claim 1, the claimed invention requires that encoding is performed in units of a video signal corresponding to a predetermined number of vertical periods, *intervals at which data of a header of the encoded video signal corresponding to the predetermined number of vertical periods is transmitted conform to the predetermined number of vertical periods*. As such, the data of a header corresponds to the predetermined number of vertical periods. Thus, while Ohura uses the words flag and header, they are not the same as the flag and header required by the claimed invention. Applicant respectfully asserts that the flag and header of the claimed invention must be read in the context of the specification and afforded the meaning set forth therein. As such, Ohura fails to show or suggest, at least, “a flag extraction section which extracts a flag indicative of a header portion of the transmission signal added to the header portion of the transmission signal which is radio-received” as required by claim 4. With respect to claim 7, Applicant respectfully notes that claim 7 depends from claim 2, and is allowable for the same reasons set forth above with respect to claim 2.


In view of the above, independent claims 2 and 4 are patentable over Ohura for at least the reasons set forth above. Dependent claim 7 is allowable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 08228/095001).

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Respectfully submitted,

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